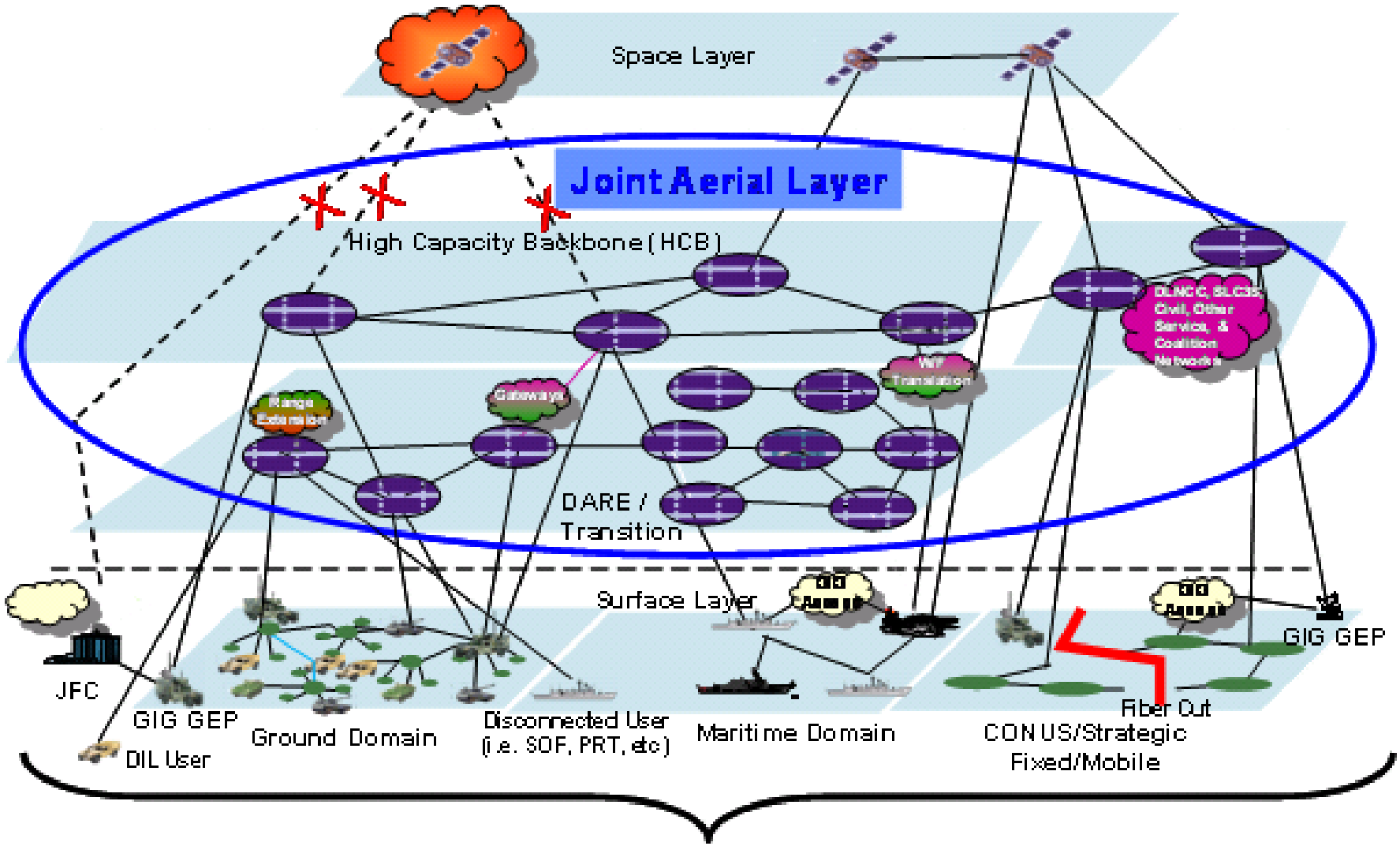
Joint Aerial Layer Network (JALN)

Purpose

- **To provide the status of JALN efforts to the spectrum community and gain insights on spectrum considerations**
  - **OV-1**
  - **Initial Capabilities Document**
  - **Analysis of Alternatives Recommendations**
  - **Ongoing efforts and governance**
  - **Way Ahead**

JALN Operational View



Joint Forces operating inside a Joint Operational Area (JOA)

JALN Initial Capability Document

Four Capability Gaps

- Network Connectivity
- Network Capacity
- Share Information and Data
- Network Management

map to

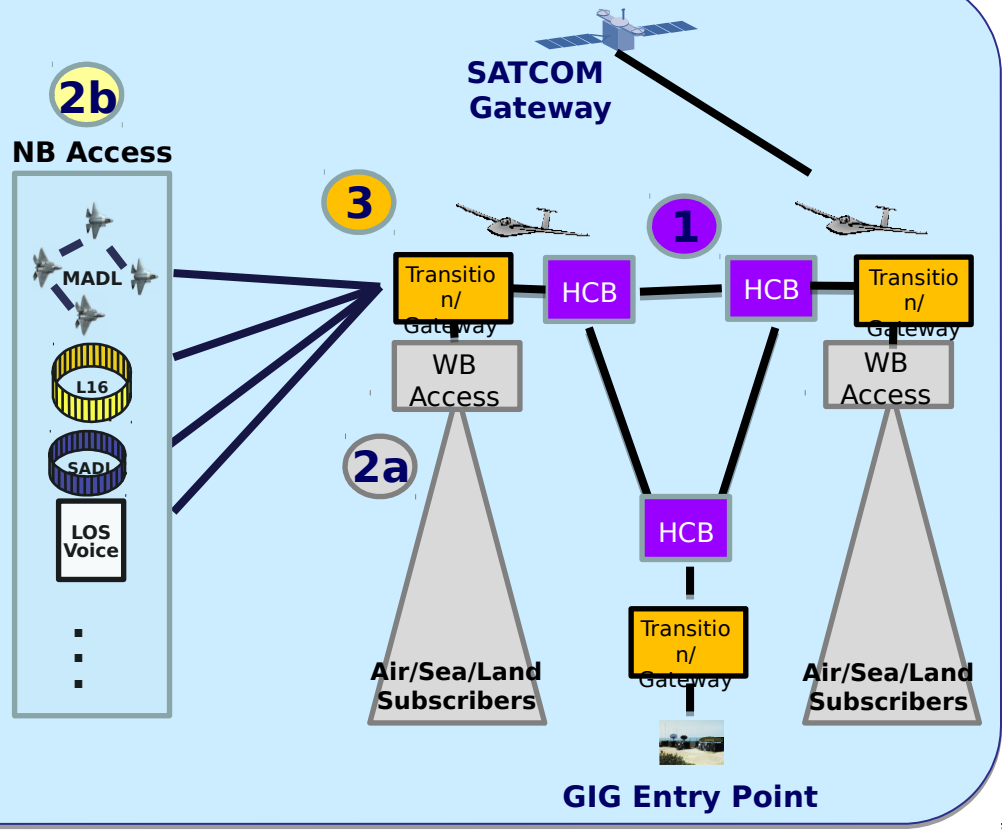
Three Core Functions

1 ***High Capacity Backbone (HCB)***
- Long haul backbone

2a ***Wideband Access (WB Distribution, Access, Range Extension)***
- Comms access waveform(s)
- Opportunistic Mesh Relays***

2b ***Narrowband Access (NB DARE)***
- Fielded waveforms needing gateway functionality

3 ***Transition/Gateway***
- Gateway functionality to bridge nets



JALN Core Functions

1. ***High Capacity Backbone (HCB)***
   - Long haul reach-back

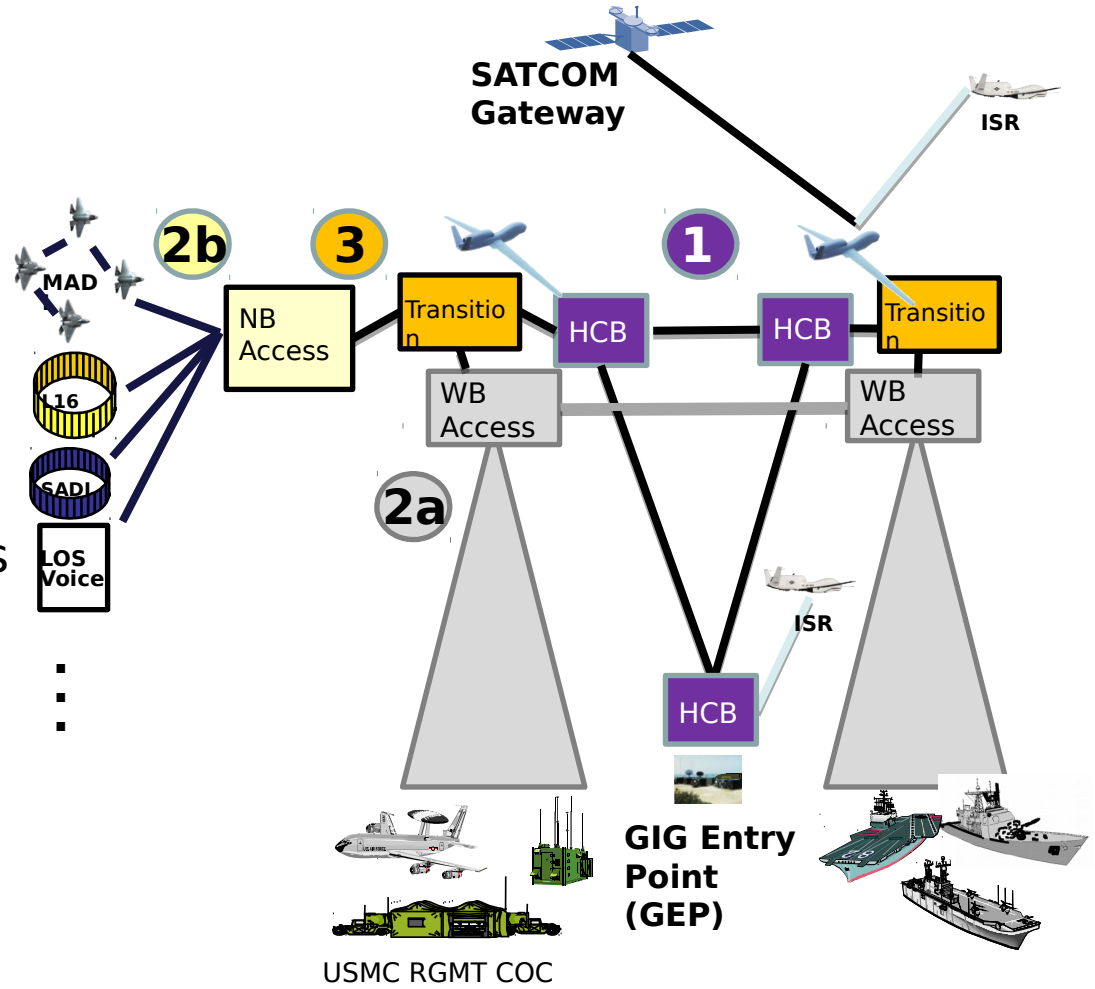
2a. ***Wideband Distribution, Access, Range Extension (WB DARE)***

2b. - Communications access waveform(s)

- ***Narrowband DARE (NB DARE)***

3. - Fielded waveforms needing gateway functionality

- ***Transition***



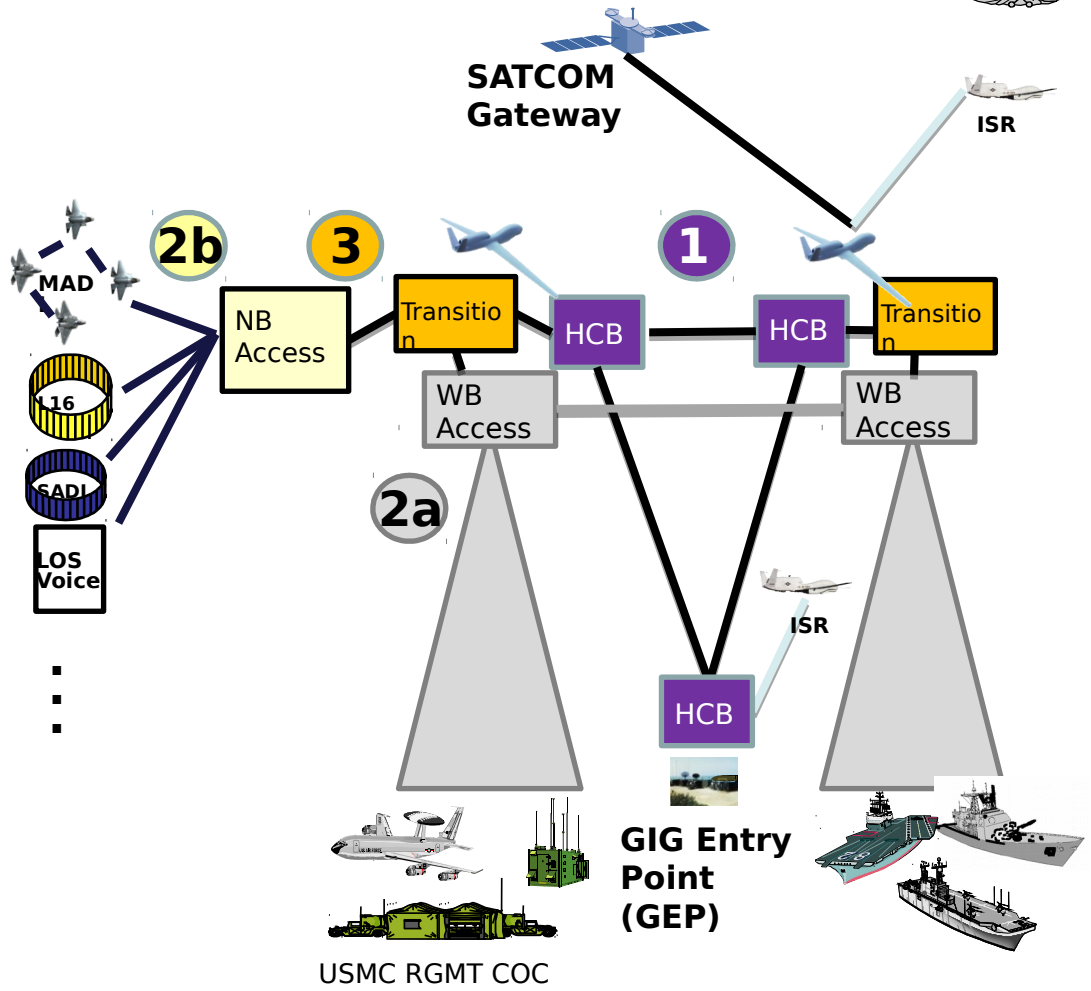
AoA Recommendations

1. ***High Capacity Backbone***

2a
- ***Wideband DARE***
  - **BE-CDL**
  - **XDR (enhanced EW)**
  - **HNWv3**

2b
- ***Narrowband DARE***
  - **NCDL**
  - **Link 16, LOS voice, IFDL, MADL, SADL, WNW, SRW/ANW2**

3
- ***Transition***
  - **Dedicated JALN Nodes at High and Med Altitude**
  - **5th to 4th Generation**
  - **GEPs : HCB, WB DARE, ISR Access**



Ongoing Efforts and Governance

- C4/Cyber FCB for oversight and synchronization
- JALN Council (O-6) for day-to-day leadership
  - Prioritized post-AoA activities

Rank	Activity
1	Refine CONOPS and develop CONEMP
2	Address net management gap
3	Conduct operational effectiveness
4	Address data and information sharing gap
5	Integrate JALN solution with A2/AD efforts
6	Develop DCR outlining non-materiel solutions
7	Analyze JALN enterprise-level spectrum availability and supportability
8	Analyze multi-level security considerations, including information assurance
9	Outline transition roadmap of near-term into long-term solutions
10	Conduct risk assessment

Spectrum is #7 on list

Way Ahead

- Finalize JALN solution
- Conduct holistic spectrum analysis
  - Need your help here
- Promote spectrum efficiencies
- Your thoughts?